

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/964,824C

DATE: 06/03/2003 P.6

TIME: 13:40:14

Input Set : A:\Avalon 73.txt

Output Set: N:\CRF4\06032003\1964824C.raw

```
4 <110> APPLICANT: Horrigan, Stephen
      6 <120> TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using
             Signature Gene Sets
      9 <130> FILE REFERENCE: 689290-73
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/964,824C
C--> 11 <141> CURRENT FILING DATE: 2001-09-27
     11 <150> PRIOR APPLICATION NUMBER: US/60/236,033
     12 <151> PRIOR FILING DATE: 2000-09-28
     14 <150> PRIOR APPLICATION NUMBER: US/60/236,032
     15 <151> PRIOR FILING DATE: 2000-09-28
     17 <150> PRIOR APPLICATION NUMBER: US/60/236,028
     18 <151> PRIOR FILING DATE: 2000-09-28
     20 <160> NUMBER OF SEQ ID NOS: 583
     22 <170> SOFTWARE: PatentIn version 3.0
     24 <210> SEO ID NO: 1
     25 <211> LENGTH: 521
     26 <212> TYPE: DNA
     27 <213> ORGANISM: Homo sapiens
     29 <220> FEATURE:
     30 <221> NAME/KEY: misc feature
     31 <222> LOCATION: (1)...(521)
     32 <223> OTHER INFORMATION: n=a,t,g or c
     35 <400> SEQUENCE: 1
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     38 ggaacagtag acttetattg tetteaatee etaatgteet agtgagtatg taccetatgg
                                                                              120
     40 agaaggcaga aatgacgtgg accaggactc cttacatgga gagtgtttta aaggcagttt
                                                                              180
     42 ttaaaaagcc cattttgtga aagaaaccag aaggctcgta attgctgtct gcactgtggt
                                                                              240
W--> 44 ttctcctggg ggttggggag gggagtggat taaataaaaa gtttagaagg ccatagnata
                                                                              300
     46 aatatcgaaa tagtatgaat tttaatatat acttttaaag gggttaggca atgatgaaaa
                                                                              360
     48 gatatgactg ctttcctttc atttctcatt aaattaaaat tcccacaaaa gtgcatggca
                                                                              420
    50 tetttttgaa acaetgetaa ttttaaagtt tgggaaggtt tatetteata gecacaatet
                                                                              480
    52 ttgcnaaagc cttggtaccg gnaacaaggc tccagtctgc c
                                                                              521
     55 <210> SEQ ID NO: 2
    56 <211> LENGTH: 481
   .57 <212> TYPE: DNA
     58 <213> ORGANISM: Homo sapiens
     60 <400> SEQUENCE: 2
   ~ 61 ataaatggtt tatttttaac ataagtaaat ttacaaatca aatgaaaaat gaaaaataca
     63 aaagttcatg aatgaaataa aaaagacact ctcaaaatat taaaacctat ggaaagaaaa
                                                                              120
   . 65 taagtaatta atgaatgatg tttttgtttc caaatacaat gaagtgattt tttattagag
                                                                              180

    67 tccttgggaa tcatctaagt tacaatacag aagagaatta aataaatcgt atatgatttt

                                                                              240
     69 gtaattagac actctatata tcacagttct ttgttaacct gggcatggaa cgtccctata
                                                                              300
```

71 gcatatattt aaaaccatta attttttta aaaaaatttg agacatggtt tgttcttgtt

360

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```
73 ctctaaatta tgtttcccca tttcccttga atgttctcta ttggccatct tctggaacat
                                                                              420
     75 taaaaaaaaa tottgaaaca aattotottg caatgatacg tatcacataa acttgatatg
                                                                              480
     77 c
                                                                              481
     80 <210> SEQ ID NO: 3
     81 <211> LENGTH: 357
     82 <212> TYPE: DNA
     83 <213> ORGANISM: Homo sapiens
     85 <400> SEQUENCE: 3
     86 gagcggtgga gggcgtcact gggtttcggc gtctggcaaq cgattcagct gtctgctccc
                                                                               60
     88 tagcageegg cettegggte gggegtette eeeggetaet geegetteag ttetteeggt
                                                                              120
     90 gtggccacga gtcgggttgc acttctgtga tccatcctca tcttctaaag atgcatcctg
                                                                              180
     92 acttatetee acaettgeae actgaagaat geaaegtett gattaaettg ettaaggaat
                                                                              240
     94 gtcacaaaaa tcacaacatt ctgaaatttt ttgggtattg taatgatgtt gatcgggggt
                                                                              300
     96 ggagagaatg cctctagagt gatgtacata gagaacagga gcccqagcag ggggcat
                                                                              357
     99 <210> SEQ ID NO: 4
     100 <211> LENGTH: 1086
     101 <212> TYPE: DNA
     102 <213> ORGANISM: Homo sapiens
     104 <400> SEQUENCE: 4
     105 egeageegee egeeegeeg eteagegee ggeeeeggga tgaeggegge eeaggeegeg
     107 ggtgaggagg cgccaccagg cgtgcggtcc gtcaaggtgg tcctggtggg cgacggcggc
                                                                               120
     109 tgcgggaaga cgtcgctgct gatggtcttc gccgatgggg ccttccccga gagctacacc
                                                                               180
     111 cccacggtgt ttgagcggta catggtcaac ctgcaagtga aaggcaaacc tgtgcacctc
                                                                               240
     113 cacatetggg acacagcagg gcaagatgac tatgaccgcc tgcggcccct gttctaccct
                                                                               300
     115 gacgccagcg tectgetget ttgettegat gteaceagee egaacagett tgacaacate
                                                                               360
     117 tttaaccggt ggtacccaga agtgaatcat ttctgcaaga aggtacccat catcgtcgtg
                                                                               420
     119 ggctgcaaga ctgacctgcg caaggacaaa tcactggtga acaagctccg aagaaacgga
                                                                               480
     121 ttggagcctg tgacctacca caggggccag gagatggcga ggtccqtqqq cgcggtqqcc
                                                                               540
     123 tacctcgagt gctcggctcg gctccatgac aacqtccacg ccgtcttcca qqagqccqcc
                                                                               600
     125 gaggtggccc tcagcagccg cggtcgcaac ttctggcggc ggattaccca gggcttttgc
                                                                               660
     127 gtggtgacct gagcggctcg gggcgtccca gcgacgcggg aaggggcagg gcgctgacct
                                                                               720
     129 getgetgage tggetggget ggaeceggte cetaggetgt gaecgeegaa etecaetgea
                                                                               780
     131 acagacgggc gccaccaaag ccaggccctg aggcctggga gtcctggact gagaaagggg
                                                                               840
     133 gttcctgggc ccacctgctc tgtgtagggc tcgtcctgcg gtgcccgaga atcactcgct
                                                                               900
     135 aacccctatg cccqqtcccq qaccqacatc ctqqaqccqc ctqtqcaqcc tqatqccccc
                                                                               960
     137 tegtggetge teccaggget geacetgeea ggacetaatg ttettaggte cetetggeea
                                                                              1020
     139 gaacccacac ccggcccctt cccacctgtc atactggtaa ctgtaacaag aaaaacgaca
                                                                              1080
     141 tcactt
                                                                              1086
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    145 <211> LENGTH: 486
     146 <212> TYPE: DNA
     147 <213> ORGANISM: Homo sapiens
    149 <220> FEATURE:
     150 <221> NAME/KEY: misc feature
     151 <222> LOCATIOM: (1)...(486)
     152 <223> OTHER INFORMATION: n=a,t,g or c
    155 <400> SEQUENCE: 5
     156 tagcaccatg atcctcgcgc tggagctgtg tgaggagatc gtggtctatg ggatggtcag
                                                                               60
W--> 158 cgacantanc tgcagggaga agagccaccc ctcagtgcct taccactact ttgagaaggg
                                                                               120
```

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		output Set	: N:\CRF4\(06032003/190	54824C.raw		
*	252	cgtgcttcat ccctttattg	aaqaacaqaa	aattatqact	actctacaaq	gtggataata	180
		ttttggtacc tgtggctggc					240
		ttgacttcca agacctagca		-	- "	-	300
W>		tgcagggagg gcaatagctt					360
		qtcctaqtqc ttccqaatca					420
		aatccatgaa attacattta	2 2			_	480
		<210> SEQ ID NO: 8	guagaccccc	ageaceeaac	ggcagccccc	ccatgaattt	400
		<211> LENGTH: 416					
•		<212> TYPE: DNA					
		<213> ORGANISM: Homo s	aniene				
		<220> FEATURE:	apiens				
-		<221> NAME/KEY: misc f	Fastura				
		<222> LOCATION: (1)					
		<223> OTHER INFORMATION		or c			
		<400> SEQUENCE: 8	7N. 11-a, c, g	01 C			
₩>		atttcagang aagtttatta	agaggtttta	aactttaaac	atatotosas	20022222+	60
" /		acattttaaa gtatataatt					120
		agactctata agataaccaa					180
		aagaggaata ggcaaataga					240
		ctgcaaaatg tctcctactt					300
		actgtctgta tacttttgcc					360
		ttttgactgt cagtaaaaga					416
		<210> SEQ ID NO: 9	acggcacggc	ggcccaccc	cccirccacc	aucage	410
		<211> LENGTH: 371					
		<212> TYPE: DNA					
		<213> ORGANISM: Homo s	apiens				
		<400> SEQUENCE: 9	- F				
		tttgacacgt gaagggttat	ttatggttat	gatgaccctg	tcctgcaacg	agggactggc	60
		agccactact gaggaggagg					120
		cagacgtggg gcaaaggtgt	_				180
		ggctcacagg gcccaggagt	_	_			240
		gtgcacaccg cacctgtgga	_				300
		caggatggtt ggcgttcagc					360
•		ccctcctgc c					371
	314	<210> SEQ ID NO: 10					
	315	<211> LENGTH: 419					
•		<212> TYPE: DNA					
	317	<213> ORGANISM: Homo s	apiens				
		<400> SEQUENCE: 10					
		aagtattctg tccctttaat					60
		gcttaggacg ggcgggtgca					120
		ccacatgcag gcggtagttg					180
		ttgcccctca gtgccctgtg					240
		tggaagatct gagatggagg					300
		gtgatattga gggcccggtc					360
		ctgagagagc cctgataggt	gatgaaaccg	aagattcagg	gaacaggagc	tccaggctc	419
		<210> SEQ ID NO: 11					
		<211> LENGTH: 270					
	337	<212> TYPE: DNA					

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338	<213> ORGANISM: Homo sapiens								
340	<400> SEQUENCE: 11								
341	tacagggcaa cccaccccta ggcaaagcct	cggcctctcc	cacctccccc	acgtcatcac	60				
343	tgagctgcgg cacgcagagg tgccagccaa	ttccgaggag	aattgggtcc	aatagaaata	120				
345	tttacaaata accagggggc aggtgtgccg	tgatcgggaa	tcgtgaggga	actgagtacc	180				
	agggggccct tggctcccaa cagccccagg				240				
	agggaactgg ggcattgggg ggccggcaga	3333 3	3 3 3	,	270				
	<210> SEQ ID NO: 12								
353	<211> LENGTH: 255								
354	<212> TYPE: DNA								
355	<213> ORGANISM: Homo sapiens								
357	<400> SEQUENCE: 12								
358	tttagtttag caccatttat taagtgatct	cagctgttgt	tgtagctgct	gcgtgtcacc	60				
	gtgttcttaa aacataaaat gctcttccga				120				
	aggtagcacg ccaacagaac aagagactcc				180				
	cagagagga gagggtcatg gcacattcaa		_		240				
	cctttggggg cccag	2 2 3	3 33		255				
369	<210> SEQ ID NO: 13								
370	<211> LENGTH: 358								
371	<212> TYPE: DNA								
372	<213> ORGANISM: Homo sapiens								
374	<400> SEQUENCE: 13								
375	caggttgaat aaaatttaat tgataatgct	ttatattaat	attctctttt	gcatttaaat	60				
377	attatatgaa tactacaagc atccaacaag	aaataacctt	cataaattag	cataatttat	120				
379	agcaggaaac ccaaataaac taaacttggc	tgcctaaaat	aatttgtcta	aagggggata	180				
381	tgctctttgt aagtatcatg ctgataaaac	cataaaaatt	cttttagagg	aatgaggatt	240				
383	aaaatgaaat ttctttatga cacggaaaaa	aataataatt	tgtctaaaag	tgtaaaattt	300				
385	taaaagcaaa cattatacac ataaccagca	caattatttc	catcttaaaa	cattggtt	358				
388	<210> SEQ ID NO: 14								
	<211> LENGTH: 266								
	<212> TYPE: DNA								
	<213> ORGANISM: Homo sapiens								
	<400> SEQUENCE: 14								
	atggctaatg gtgacacact ttattaattt	_			60				
	ggcatgtgca cattttccta gaaggacatg				120				
	ggcatctaca gggtcattcg aggaggaaca				180				
	taaatagcag catcatcaga tctaagacaa	cattggacct	ggcagggcct	tttctttggg	240				
	tggcattaat tactccagat tcagac				266				
	<210> SEQ ID NO: 15								
	<211> LENGTH: 287								
	<212> TYPE: DNA								
	<213> ORGANISM: Homo sapiens								
	<400> SEQUENCE: 15								
	aacgtaaaca caaagtctca tttatttttg				60				
	ataacagtaa gcgaatcata caaatattga				120				
	atattcttaa gagtagcgat caggagttta				180				
	aatgctttct gacaggcttt tgggttggaa			cacataacag	240				
	gtaagctaag aataacttct gttacccaag	tcatttgaac	cctgtgg		287				
422	<210> SEQ ID NO: 16								

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:1; N Pos. 297,485,502
Seq#:5; N Pos. 66,69,389,483
Seq#:7; N Pos. 331
Seq#:8; N Pos. 9,404
Seq#:16; N Pos. 113,115,248,252
Seq#:17; N Pos. 15,386
Seq#:21; N Pos. 90,258
Seq#:22; N Pos. 330,361,419
Seq#:23; N Pos. 371,416
Seq#:24; N Pos. 217,232,315,333
Seq#:27; N Pos. 26,199
Seq#:28; N Pos. 145,222,228
Seq#:51; N Pos. 92,118,152,153,235,237,238,239,244,245,248,263,270,284
Seq#:52; N Pos. 12,352,359,400,408
Seq#:54; N Pos. 346,368
Seq#:55; N Pos. 180
Seq#:56; N Pos. 27
Seq#:57; N Pos. 432,478,495
Seq#:59; N Pos. 481
Seq#:63; N Pos. 104,120,188
Seq#:64; N Pos. 44,146,265,285
Seq#:65; N Pos. 11,130,133,190,313
Seq#:66; N Pos. 375,417
Seq#:68; N Pos. 146
Seq#:69; N Pos. 187,223
Seq#:70; N Pos. 3
Seq#:71; N Pos. 158,161,274,393
Seq#:77; N Pos. 8,10,11,21,28,37,54,55,117,126,130,133,152,154,155,158,159
Seq#:77; N Pos. 160,161,164,179,180,187,193,335,417,461,503,526
Seq#:78; N Pos. 398
Seg#:79; N Pos. 519,535
Seq#:80; N Pos. 575
Seq#:81; N Pos. 167
Seq#:90; N Pos. 274,366,371,458,463,496,504,510,519
Seq#:91; N Pos. 12,89,109,191,468
Seq#:93; N Pos. 2,3,35,158,199,238,271,421,459,524,540
Seq#:107; N Pos. 503,512
Seq#:108; N Pos. 343
Seq#:118; N Pos. 59,315,325,330,343,355,363,369,394
Seq#:123; N Pos. 410
Seq#:124; N Pos. 332,463,492,510,525,541,546,551,589,606,622
Seq#:125; N Pos. 515
Seq#:126; N Pos. 3,4,5,12,174,390,401,429,483,524,530,532,533,534,535,536
Seg#:126; N Pos. 537,538,539,540,541,542,543,544,545,546,547,548,549,550
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Seq#:126; N Pos. 551,552,553,554,556,557,560,561,568,569,570,572,573,574
Seq#:126; N Pos. 575,576,577,578,579,580,581,583,584,585,586,587,588,589
Seq#:126; N Pos. 591,593,594,595,597,598,599,600,602,603,604,606,607,609
Seq#:126; N Pos. 610,611,612,613,614,615,616,619,620,621,622,624,625,626
Seq#:126; N Pos. 627,631,632,633,634,635,636,638,639,641,643,644,646,648
Seq#:126; N Pos. 649,651,652,653,654,655,656,659,662,663,665,667,668,669
Seq#:126; N Pos. 671,674,675,677,678,679,680,681,682,683,684,686,688,690

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```
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:240
M:341 Repeated in SeqNo=1
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:60
M:341 Repeated in SeqNo=5
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:300
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:60
M:341 Repeated in SeqNo=16
L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
M:341 Repeated in SeqNo=17
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:60
M:341 Repeated in SeqNo=21
L:571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:300
M:341 Repeated in SeqNo=22
L:605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:360
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:180
M:341 Repeated in SeqNo=24
L:695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
M:341 Repeated in SeqNo=27
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:120
M:341 Repeated in SeqNo=28
L:1209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60
M:341 Repeated in SeqNo=51
L:1231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
M:341 Repeated in SeqNo=52
L:1288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:300
M:341 Repeated in SeqNo=54
L:1310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:120
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:1374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:420
M:341 Repeated in SeqNo=57
L:1431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:480
L:1504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:60
M:341 Repeated in SegNo=63
L:1526 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
M:341 Repeated in SeqNo=64
L:1552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0
M:341 Repeated in SeqNo=65
L:1590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\#:66 after pos.:360
L:1631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:120
L:1657 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:180
L:1675 M:341 W: (46) "\vec{n}" or "Xaa" used, for SEQ ID#:70 after pos.:0
L:1690 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:16.99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:120
M:341 Repeated in SegNo=71
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 $L\!:\!1820$ M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0

M:341 Repeated in SeqNo=77

L:1866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:360 L:1900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:480 L:1936 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:540

US 099648240IP1



Creation date: 11-28-2003

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Legal Date: 06-10-2003

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1	CRFL	9

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